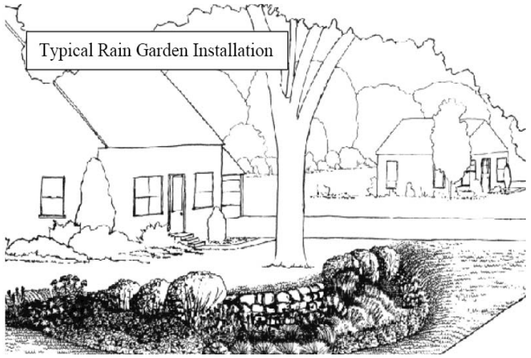
Landscaping. Consider replacing paved surfaces with trees, shrubs, grasses, or other groundcover.



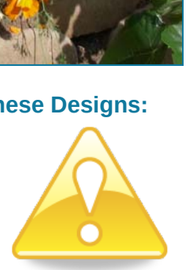
This provides an opportunity to reintroduce native vegetation, which can:

- stabilize soils,
- reduce runoff,
- remove water pollution naturally,
- create habitat for animals, birds, butterflies, and
- reduce water use.

Selecting appropriate plants, preparing your soil, and including landscaped depressions and other design considerations are critical factors in reducing storm water runoff and improving water retention on your property.

Safety Issues to Consider for These Designs:

- Depth of standing water
- Vector control
- Site erosion
- Slope stability



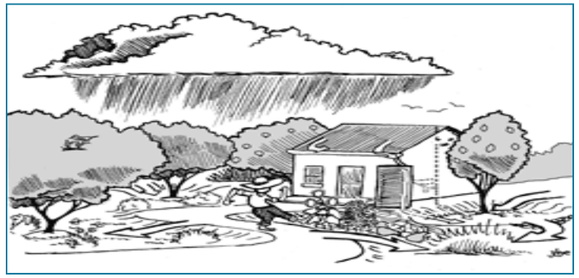
Help protect water quality in your City by following the City's water quality guidelines.

Please refer to the City's **Storm Water BMP Guidance Manual** for specific details at:

www.sbcreeks.com

(under the "Storm Water Management Program" link)

AMalanca@SantaBarbaraCA.gov
Ph: (805) 897-1910 Fax: (805) 897-2626



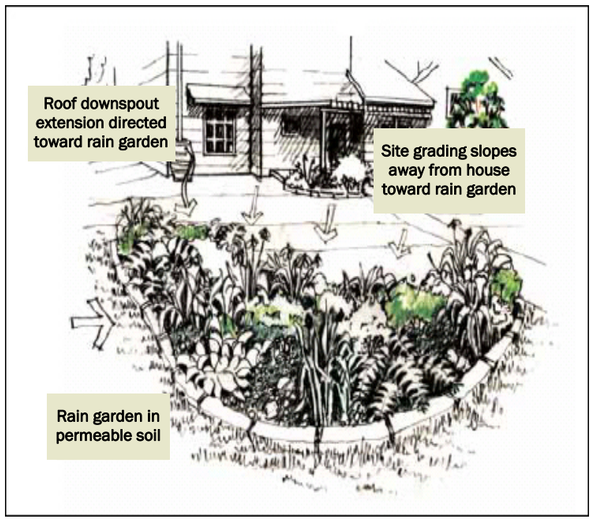
*All properties (and solutions) are unique; please be sure to **consult an appropriate design professional** for design/implementation advice.*

City of Santa Barbara
Community Development Dept.
630 Garden Street
P.O. Box 1990
Santa Barbara, CA 93102

City of Santa Barbara

A Homeowner's Guide to Managing Storm Water

Simple things you can do to reduce storm water flows and water pollutants from your home.



...Reduce water pollution, creek erosion, and flooding...

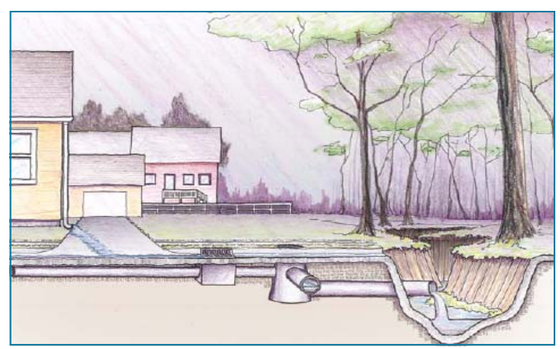
The City of Santa Barbara recently produced a **Storm Water Guidance Manual** to help people understand the water quality requirements that apply to their projects.

Requirements are in place because storm water runoff picks up pollutants as it flows across roofs, sidewalks, driveways, and streets.

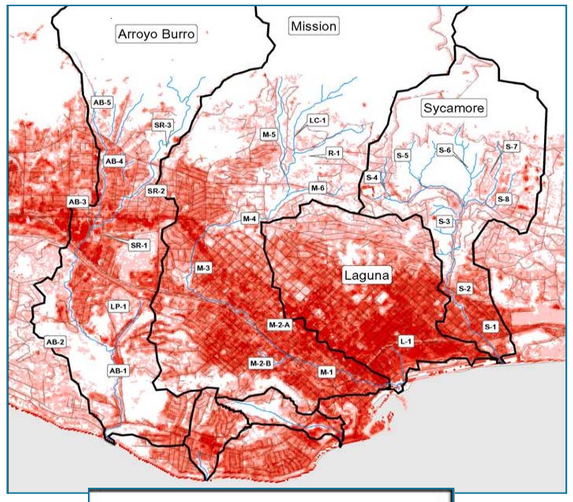
From there, storm water flows through gutters, channels, and storm drains, directly to local creeks and the ocean,

Urban storm water runoff is the largest source of surface water pollution in Santa Barbara!

Why send rain water to the dirty street? You can capture or redirect rain water for irgation or soak it into the ground for natural treatment and to replenish groundwater. Storm water can be used as a resource rather than wasted.



Santa Barbara has a lot of hard (impermeable) surfaces!



Many of our open spaces and natural soils where **water *used to* soak in** are now paved over or built upon! So the City has more runoff water carrying pollutants to our creeks and beaches than ever before.

So what can YOU do??

You can choose simple designs to capture and treat storm water!

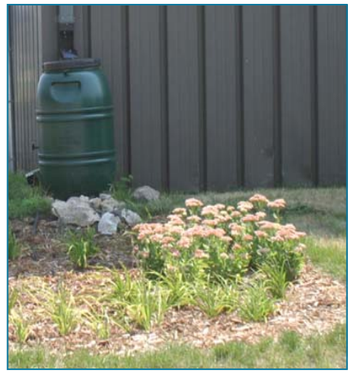
Moving Down-spouts away from paved areas diverts rain water from roof gutters to yards and landscaping (sloped away from the home) This allows water to filter into the ground. The downspout must be angled at least 4-6 feet away from the structure in order to avoid water damage to the foundation!

Flow Spreading spreads runoff over a natural, pervious area rather than concentrating runoff to a pipe.

It may be used to spread and filter water runoff from driveways, roof downspouts, and other open surfaces.

Rainwater Gardens are landscaped depressions in your yard that collect and store storm water, allowing it to soak in, evaporate, and nourish plants. These gardens require sloped sides plants that can withstand standing water and drought.

For design details, see the City's Guidance Manual online at www.sbcreeks.com or visit www.raingardennetwork.com.

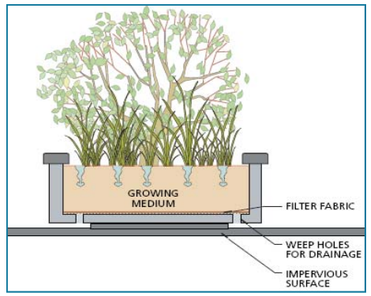


Rain Barrels are above ground storage containers that capture the "first flush" of runoff from roofs during rain events and store the water for later use.

To help you decide how big or how many barrels you want to buy, a general rule of thumb is: ***1 inch of rain that falls on a 1,000 square foot roof = 600 gallons of water!***

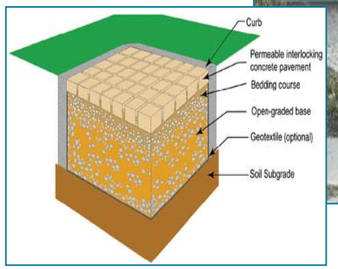
First Flush = The beginning of a rain storm which carries the most polluted water. This is what's caught by barrels, and the pollutants from roof runoff

Contained Planters are containers that hold soil and plants, providing areas where water can be captured and naturally cleaned. These can be built to drain slowly into the ground (open bottom) or with an overflow design. *For sizing and design details see the City's Guidance Manual!*



Depression Storage is the use of simple depressions, either artificial or natural, for storing storm water to allow it to soak into the ground. This is similar to rainwater gardens, but its vegetation is usually grass or another dense groundcover.

Permeable Pavements contain small holes in the pavement that allow water to pass through to gravel beneath, where water can slowly soak into the soil or drainage system underneath.



There are many forms of permeable pavements, including pervious concrete, pavers, grass-pavers, and gravel pavers (gravel is normally only allowed 200 feet from a public street).

Soil Amendments, such as compost, fertilizers, and mulch, alter your soil to allow greater infiltration which reduces runoff, filters pollutants, increases the quality of your yard's plants, and reduces soil erosion (once planted). The soil amendments also increase nutrient-holding capacity and improve aeration.

Ribbon Driveways decrease the amount of hard surface by limiting the paved area of your driveway to narrow driving strips.

The permeable strip in between catches oil drips from your car, as well as absorbs storm water.